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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,004	10/16/2003	John Jerald Urlaub	18662	7451
22827	7590	11/15/2006		
DORITY & MANNING, P.A. POST OFFICE BOX 1449 GREENVILLE, SC 29602-1449			EXAMINER AUGHENBAUGH, WALTER	
			ART UNIT 1772	PAPER NUMBER
DATE MAILED: 11/15/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/687,004	Applicant(s) URLAUB ET AL.	
	Examiner Walter B. Aughenbaugh	Art Unit 1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 1 May 2006 and 17 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 34-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 34-49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>12/12/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Acknowledgement of Applicant's Amendments

1. New claims 34-49 presented in the Amendment filed May 1, 2006 (Amdt. A) have been received and considered by Examiner.

WITHDRAWN OBJECTIONS

2. The objection to the abstract made of record in paragraph 3 of the previous Office Action mailed November 30, 2005 has been withdrawn due to Applicant's filing of the replacement abstract on August 17, 2006.

NEW REJECTIONS

Claim Rejections - 35 USC § 102

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 34-42 and 45-49 are rejected under 35 U.S.C. 102(b) as being anticipated by Handjani et al.

In regard to claim 34, Handjani et al. teach a product (cosmetic) that is enclosed within a package (container in which the cosmetic is necessarily stored), where the package comprises a paper product (alginate capsules) and a packaging material (the material of the container in which the cosmetic is necessarily stored) that encloses the paper product and defines a headspace between the paper product and the packaging material (a headspace necessarily exists in a container containing a cosmetic that contains alginate capsules) (col. 1, lines 33-46 and 60-61 and col. 2, lines 33-55). The alginate capsules are a paper product because alginate is a well known substance used in the production of paper as evidenced by USPN 4,089,646 to Haberer

Art Unit: 1772

et al. at col. 2, lines 63-66. Handjani et al. teach that the package comprises metal modified nanoparticles (col. 2, lines 33-55 and 62-65 and col. 1, lines 60-65). Handjani et al. teach that the metal modified nanoparticles are configured to neutralize gaseous or odorous compounds within the headspace because the metal modified nanoparticles are incorporated into the cosmetic that is in the package (col. 1, lines 33-46 and col. 2, lines 33-38). The metal modified nanoparticles have an effective particle diameter of less than about 500 nanometers because Handjani et al. teach that the metal modified particles are nanoscale particles (col. 2, lines 45-46).

In regard to claim 35, the packaging material necessarily defines an inside surface, and the metal modified nanoparticles of Handjani et al. are positioned on the inside surface because the metal modified nanoparticles are a component of the cosmetic, and the cosmetic is stored inside the container that comprises the packaging material (col. 2, lines 33-55).

In regard to claim 36, the metal modified nanoparticles are positioned on an insert (cosmetic) located within the package because the metal modified nanoparticles are a component of the cosmetic, and the cosmetic is stored inside the container (col. 2, lines 33-55).

In regard to claim 37, the insert (cosmetic) is attached to an inside surface of the packaging material because the cosmetic is stored inside the container that comprises the packaging material (col. 2, lines 33-55).

In regard to claim 38, the nanoparticles of Handjani et al. cover 100% of the surface of the insert (cosmetic) that the nanoparticles contact (Applicant recites "a surface of the insert": the surface/s of the cosmetic that the nanoparticles contact is/are "a surface of the insert").

In regard to claim 39, Handjani et al. teach that the nanoparticles contain an organic compound (various organic compounds disclosed at col. 2, lines 50-58).

Art Unit: 1772

In regard to claim 40, Handjani et al. teach that the nanoparticles may contain silica since silica is a well known mineral powder (col. 2, line 56) as evidenced by USPN 3,933,666 to Yoneno et al. at col. 4, lines 11-13.

In regard to claim 41, Handjani et al. teach that the nanoparticles are modified with copper, silver, iron, which necessarily includes iron (II) and iron (III), or manganese (col. 1, lines 60-65).

In regard to claim 42, Handjani et al. teach that the nanoparticles may be copper-modified silica nanoparticles since silica is a well known mineral powder (col. 2, line 56) as evidenced by USPN 3,933,666 to Yoneno et al. at col. 4, lines 11-13, and since Handjani et al. teach that the nanoparticles may be modified with copper (col. 1, lines 60-65).

In regard to claim 45, Handjani et al. teach that the package comprises unmodified nanoparticles blended with the metal modified nanoparticles (col. 2, lines 33-38 and 45-46): the nanoparticles of Handjani et al. are “unmodified” because they are characterized as “nanoparticles” and the nanocapsules of Handjani et al. are “modified” because they are “modified” to be nanocapsules.

In regard to claims 46 and 47, the recitations “wherein the paper product is a tissue product” and “where paper product is a paper towel” are intended use phrases that have not been given patentable weight, since it has been held that a recitation with respect to the manner in which a claimed article is intended to be employed does not differentiate the claimed article from a prior art article satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQd 1647 (1987).

Art Unit: 1772

In regard to claims 48 and 49, the recitations “the paper product is wrapped around a cylindrical core” (claim 48) and “the metal modified nanoparticles are applied to the cylindrical core” (claim 49) are method limitations that have not been given patentable weight since the method of forming the article is not germane to the issue of patentability of the article itself.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 43 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Handjani et al.

Handjani et al. teach the package as discussed above in regard to claim 34.

Handjani et al. fail to teach that the nanoparticles have the claimed surface areas claimed in claims 43 and 44.

However, nanoparticles and nanocapsules are high surface area materials because they are nanoscale particles/capsules (col. 1, lines 33-46 and col. 2, lines 33-55). Since a decrease in

Art Unit: 1772

size of a particle/capsule results in an increase of surface area/volume ratio of the particle/capsule, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have varied the average size of the nanoscale particles/capsules of Handjani et al. in order to achieve the desired surface area depending on the particular desired end result, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art in the absence of unexpected results. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Response to Arguments

7. Applicant's arguments regarding the applicability of Handjani et al. to the newly presented claims have been fully considered but are not persuasive.

Applicant argues that Handjani et al. do not teach that the nanoparticles are modified with a metal, but Handjani et al. teach that the package comprises metal modified nanoparticles (col. 2, lines 33-55 and 62-65 and col. 1, lines 60-65). Applicant has not explained how Applicant's statement that the metal ions "are instead used to crosslink the mannuronic units and guloronic units of the alginate" addresses the rejection of record.

Applicant argues that Handjani et al. do not teach a paper product, but the alginate capsules are a paper product because alginate is a well known substance used in the production of paper as evidenced by USPN 4,089,646 to Habereeder et al. at col. 2, lines 63-66.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 1772

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter B. Aughenbaugh whose telephone number is 571-272-1488. While the examiner sets his work schedule under the Increased Flexitime Policy, he can normally be reached on Monday-Friday from 8:45am to 5:15pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is to 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Walter B. Aughenbaugh
11/12/06

WBA


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